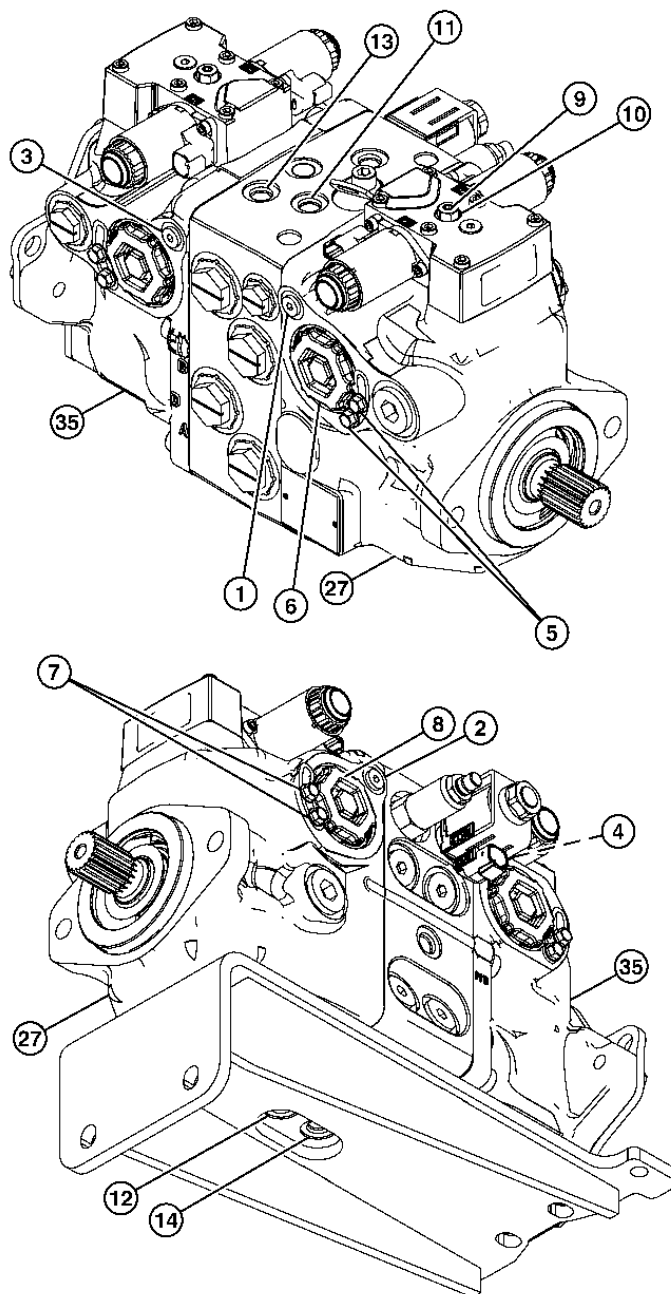


10.



TX1070858

**TX1070858-UN: Servo Cylinders and Test Ports****LEGEND:**

- 1 - Left Hydrostatic Pump Servo Port M4
- 2 - Left Hydrostatic Pump Servo Port M5
- 3 - Right Hydrostatic Pump Servo Port M5
- 4 - Right Hydrostatic Pump Servo Port M4
- 5 - Cap Screw (2 used)
- 6 - Servo Cylinder M4
- 7 - Cap Screw (2 used)
- 8 - Servo Cylinder M5
- 9 - Adjusting Screw
- 10 - Lock Nut
- 11 - System Gauge Port MB
- 12 - System Gauge Port MA
- 13 - System Gauge Port MC

14 - System Gauge Port MD

27 - Left Hydrostatic Pump

35 - Right Hydrostatic Pump

Install quick couplers in ports (1,2, 11 and 12).

11. Attach JT02161 3400 kPa (35 bar) (500 psi) Transducer to quick couplers on ports (1 and 2), for use with JT02156A Digital Pressure/Temperature Analyzer. [See JT02156A Digital Pressure/Temperature Analyzer Installation](#) . (Group 9025-25.)
12. Attach JT02162 34 000 kPa (350 bar) (5000 psi) Transducer to quick couplers on ports (11 and 12), for use with JT02156A Digital Pressure/Temperature Analyzer. [See JT02156A Digital Pressure/Temperature Analyzer Installation](#) . (Group 9025-25.)
13. Remove cap screws (5 and 7) and locking plates.
14. Loosen lock nut (10) while holding adjusting screw (9) stationary.

15.

**NOTE:**

*The park brake solenoid must be energized to provide charge pressure to pump servo piston circuits.*

Connect DFT1325 Solenoid Power Harness to battery and plug DFT connector into park brake solenoid (Y5) to energize solenoid. [See DFT1325 Solenoid Power Harness](#) for instructions on making tool. (Group 9900.)

16. Start engine and run at specification.

Item	Measurement	Specification
	Engine Speed (approximate)	1800 rpm

17. Rotate servo cylinders (6 and 8) 2—3 turns in counterclockwise direction.

18.

**NOTE:**

*Clockwise rotation of adjusting screw will increase pressure at system gauge port MA (12). Counterclockwise rotation of adjusting screw will increase pressure at system gauge port MB (11).*

Turn adjusting screw (9) clockwise until servo pressure at port M4 (1) is greater than pressure at port M5 (2). System pressure will indicate pump displacement with pressure increase at system gauge port MA.

Item	Measurement	Specification
Servo	Pressure (differential, maximum)	100—200 kPa 1—2 bar 15—30 psi

19.

**NOTE:**

*Maintain servo pressure differential between servo port M4 (1) and servo port M5 (2) while executing the following step.*

*This procedure sets servo piston and hydrostatic pump swash plate to mechanical*

*neutral on M5 side.*

Rotate servo cylinder M5 (8) clockwise until system pressure differential between system gauge port MA and system gauge port MB is less than specification.

Item	Measurement	Specification
System Pressure (differential, maximum)		150 kPa 1.5 bar 22 psi

20. Swap transducer connectors for ports M4 and M5 also transducer connectors for ports MA and MB. This will allow you to read differential pressures and set mechanical neutral on M4 side.
21. Repeat procedure to set mechanical neutral to set servo piston and hydrostatic pump swash plate to mechanical neutral on M4 side.
22. Tighten lock nut (10), to specification while holding adjusting screw (9) stationary.

Item	Measurement	Specification
Adjusting Screw	Torque	10 N·m 86 lb-in.

23. Install cap screws (5 and 7) and locking plates. Tighten to specification.

Item	Measurement	Specification
Servo Cylinder Cap Screws	Torque	14.5 N·m 128 lb-in.

24. Remove test equipment and install plugs. Tighten to specification.

Item	Measurement	Specification	Item	Measurement	Specification
Servo Port M4/M5 Plugs	Torque	12 N·m 106 lb-in.	System Gauge Port MA/MB or MC/MD Plugs	Torque	45 N·m 33 lb-ft

25. Repeat procedure for right hydrostatic pump (35). Use servo ports M4 and M5 (3 and 4) for monitoring servo pressure differential. Use system gauge ports MC and MD (13 and 14) for monitoring system pressure differential.
26. Connect hydrostatic pump solenoids (Y15—Y18) and park brake solenoid (Y5). [See Main Harness \(W3\) Component Location](#) . (Group 9015-10.)
27. Remove remote start box. [See Remote Start Box Installation](#) . (Group 9025-25.)
28. Install right side engine panel. [See Engine Side Panels—Remove and Install](#) . (Operator's Manual.)
29. Install footwell. [See Footwell Remove and Install](#) . (Group 1910.)
30. Lower operator's station. [See Raising Operator's Station](#) . (Group 1810.)
31. Raise machine and remove blocking. [See Raising and Blocking Machine](#) . (Group 1740.)